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Reactions of dialkyl phosphonates with hexacarbonylmolybdenum(0) and hexacarbonyltungsten(0). Structure of intermediates in the catalytic phosphorylation of alkenes

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Abstract

Reactions of dialkyl phosphonates with catalytic precursors in the phosphorylation of alkenes and aryl halides, homoligand molybdenum(0) and tungsten(0) carbonyl complexes, were studied by quantum-chemical and spectroscopic (IR and NMR) methods. Schemes were proposed for the transformation of catalytic precursors into active intermediates. Depending on the concentration of dialkyl phsphonate, these intermediates are the corresponding hydrogen phosphite or metal hydride carbonyl metal complexes. © 2004 MAIK "Nauka/Interperiodica".

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